

**Centers for Epidemiology and Animal Health
OIE Collaborating Center for Animal Disease Surveillance Systems
and Risk Analysis**

WORKPLAN

INTRODUCTION

The Centers for Epidemiology and Animal Health (CEAH) are part of the United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services. Their function is to provide information and technical services for animal health and other agricultural interests to ensure a safe and economical supply of food and agricultural products through a multidisciplinary team approach.

In 1998, CEAH was nominated as the Office International des Epizooties (OIE) Collaborating Center for Risk Analysis and Animal Disease Surveillance Systems. The role of Collaborating Centers is to provide Member Countries of the OIE with scientific and technical assistance and expert advice on topics linked to disease surveillance and control.

GENERAL OBJECTIVE

The Collaborating Center has four primary objectives: (1) Review, evaluate and adapt methodologies and approaches to enhance animal disease surveillance systems and the risk analysis process, (2) Promote the harmonization of methods applied in disease surveillance and risk analysis, (3) Provide technical cooperation to OIE Member countries on an Ad hoc basis in areas related to animal disease surveillance systems and risk analysis, and (4) Establish a critical mass of trained individuals in OIE member countries to improve the quality of animal disease surveillance and risk analysis.

BENEFITS

The Collaborating center nomination provides multiple benefits. It

- Provides an opportunity for leadership for CEAH and VS worldwide
- Benefits OIE member countries by providing training in risk analysis and disease surveillance methods
- Promotes the development and strengthening of disease surveillance and risk analysis capabilities in trading countries
- Promotes transparency in the disease status of countries thus reducing the risk of disease introduction through trade
- Facilitates harmonization of methods
- Enhances international trade in animals and animal products and SPS international trade negotiations

1. REVISION AND ASSESSMENT OF METHODOLOGIES

Objective

Review, evaluate and adapt methodologies and approaches to enhance animal disease surveillance systems and the risk analysis process.

Background

Disease surveillance and risk analysis are continuously evolving and need to adapt existing methods and create new approaches to meet the requirements of international trade in animals and animal products governed by the SPS agreement. CEAH has played and will continue to play a leadership role internationally in the development and application of disease surveillance and risk analysis. Emerging diseases are a continuous threat to public and animal health worldwide; the marked increase in international trade requires that surveillance systems develop methods that ensure the early detection of emerging problems.

Strategy

Develop an international network of institutions involved in risk analysis and disease surveillance both at the government level, academia, other OIE Collaborating Centers and international organizations, to review, evaluate and adapt methods and techniques needed in the context of international trade.

Activities

- Develop methods and approaches in risk analysis and disease surveillance
- Develop methods for the early detection and assessment of emerging issues
- Develop approaches to conduct statistically based nationwide commodity based surveys
- Coordinate workshops to address specific issues in disease surveillance and risk analysis
- Attendance to international meetings and symposiums

Funding

These activities are at the core of CEAH's mission and are funded directly from the assigned budget.

2. HARMONIZATION AND INFORMATION DISSEMINATION**Objective**

Promote the harmonization of methods applied in disease surveillance and risk analysis.

Background

Risk analysis in animal health is an evolving tool; as such it is important that the approaches that are being developed worldwide are compatible. This will ensure greater transparency and will provide a structured approach to decision making. Similarly, surveillance approaches are being adapted to provide valid information in a cost-effective manner. There is a need to ensure that national surveillance systems provide essential information needed to conduct risk assessments.

Strategy

Develop a network of risk analysts to analyze existing guidelines and develop a harmonized approach.

Activities

- Harmonize the approach to risk analysis internationally
- Facilitate access to technical information on risk analysis
- Establish a network of risk analysts
- Harmonize surveillance approaches
- Develop a training strategy for OIE Member Countries

Funding

Participants in meetings of the group should seek funding within their own organizations. CEAH will fund its participants and organize the meetings.

3. TECHNICAL COOPERATION

Objective

Provide technical cooperation to OIE Member countries on an Ad hoc basis in areas related to animal disease surveillance systems and risk analysis.

Background

OIE Member countries often require assistance for specific projects related to the implementation of methodologies or in-country training. CEAH is open to such requests as long as they fall within the scope of its activities as an OIE Collaborating Center.

Strategy

Promotion of CEAH's activities will be made through an information leaflet that will be widely distributed as well as through formal and informal presentations at international fora. Requests from countries will be addressed as resources permit.

Funding

The interested party should provide funding for these activities or seek support from an international organization and agencies.

4. TRAINING

Objective

Establish a critical mass of trained individuals in OIE member countries to improve the quality of animal disease surveillance and risk analysis.

Target audience

Official veterinarians directly responsible or involved with disease surveillance and/or risk analysis.

Background

The Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization requires that import trade requirements should be science based, non-discriminatory, transparent and if not based on the accepted international standards, they should be based on a risk analysis. This has placed a strong pressure on veterinary services worldwide, to strengthen disease surveillance systems and develop risk analysis methods and skills. One of the main roles of the OIE Collaborating Center for Animal Disease Surveillance Systems and Risk Analysis is to provide training to achieve this goal.

Strategy

Based on the structure of existing courses provided by CEAH, offer a modular set of courses to strengthen epidemiological concepts used in disease surveillance and risk assessment. The courses would have a sequence, however based on their previous academic experience, participants may initiate at any level. Training would be held in Fort Collins, Colorado or if adequately justified could be held in the soliciting member country.

Courses

Seminar on the use and perspectives of risk analysis (one day)

Designed to sensitize directors of veterinary services to the importance of risk analysis in the general context of the SPS agreement; general concepts of risk analysis and considerations for the requirements/training needed to establish risk analysis units.

Seminar on general concepts of surveillance and risk analysis (one week)

Designed to increase awareness and understanding of the general principles of surveillance and general concepts of risk analysis. Aimed at the field staff level of veterinary services.

Basic Epidemiology (one week)

Covers general aspects of analytic epidemiology, basic statistics and information systems. Aimed at veterinary services personnel dealing with disease surveillance and risk analysis.

Quantitative risk analysis (one week)

Covers quantitative aspects of risk assessments including the development of stochastic models that include variability and uncertainty. Aimed at veterinary services personnel dealing with risk analysis.

Geographical information systems in disease surveillance and risk assessment

Deals with the application of GIS in the analysis of disease occurrence, emergency management and exposure assessment. Aimed at veterinary services personnel dealing with disease surveillance and risk analysis.

Detection and assessment of Emerging Animal Health Issues

Covers approaches, methods and techniques for the identification, analysis, and assessment of emerging issues. Aimed at veterinary services personnel dealing with disease surveillance and risk analysis.

Funding

Participants are expected to finance their travel and expenses. CEAH will provide trainers, course materials and classrooms.

5. INTERNATIONAL PROMOTION OF CEAH'S ROLE AS A COLLABORATING CENTER

Objective

Enhance the awareness of OIE member countries of the role of CEAH as an OIE Collaborating Center.

Background

The Centers for Epidemiology and Animal Health were created to support animal health decisions within the United States. However there is a need to promote CEAH's international role among OIE member countries as well as at the OIE Central Bureau level.

Strategy

Utilize all international fora attended by CEAH personnel to promote CEAH's international role. For this purpose a brochure outlining CEAH's mission and structure and a slide presentation have been developed.

6. COOPERATION WITH OTHER COLLABORATING CENTERS

Objective

Develop a network with other OIE Collaborating Centers to coordinate activities and avoid potential duplication of efforts.

Background

The OIE has nine Collaborating Centers related to several aspects of veterinary epidemiology and diagnostics. Some of these centers have a global scope such as CEAH, others have a regional scope or a targeted scope (tropical regions, developing countries)

COLLABORATING CENTER

- Diagnosis and Control of Animal Diseases in Tropical Regions
- Surveillance and Control of Animal Diseases in Africa
- Animal Disease Surveillance Systems and Risk Analysis
- Diagnosis and Control of Animal Diseases in Eastern Europe, Central Asia and Transcaucasia
- Epidemiology and Organization of Veterinary Services in Developing Countries
- Veterinary Medicinal Products
- ELISA and Molecular Techniques in Animal Disease Diagnosis
- Diagnosis of Animal Diseases and Vaccine Evaluation in the Americas
- Information on Aquatic Animal Diseases

Strategy

Promote through the OIE regular meetings of Collaborating Center representatives to discuss their plans and seek areas of joint collaboration. Currently several center representatives meet informally during the meetings of the Working Group on Epidemiology and Informatics. However, this group will cease to exist, therefore there is a need to formalize these meetings and expand them to all Collaborating Centers, not only to those attending the Working Group meetings.

Funding

Funding for these meetings should come directly from the Collaborating Centers and from the Central Bureau of OIE.

7. GENERAL FUNDING STRATEGY

Ideally Collaborating Center activities should be self-financed. Many OIE member countries – developing countries in particular – have tight budgets for the operation of their veterinary services. Nevertheless, participants in training activities can seek funding through their country's own budget or international organizations such as FAO, IICA, OIRSA, USAID and PAHO. USDA may support some of these activities through, APHIS-IS or FAS. Similarly, financial institutions like the World Bank, IBD and others could fund participation in training activities and consultancies through existing projects or loans.

The Centers for Epidemiology and Animal Health provide funding for training as it relates to the course design, instructors time and materials. Likewise, CEAH funds the participation of experts in international fora.

In the case of training in other countries, the organizing institution should cover the travel and expenses of instructors.

COMPONENT	2000				2001				2002				2003				2004			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Revision and assessment of methodologies																				
Methods and approaches in RA																				
Methods and approaches for emerging issues																				
Methods and approaches for surveillance																				
Workshops (2/year, TBD)																				
zero prevalence surveillance design (pre-ISVEE)																				
Harmonization																				
Surveillance OIE Ad hoc group																				
OIE for the Americas Risk analysis working group																				
Meetings																				
Development of website																				
Update and maintenance																				
OIE epidemiology and informatics WG																				
Technical cooperation																				
USAID projects Nicaragua-Honduras																				
FMD cost-benefit Colombia																				
Country requests (2/year)																				
OIRSA SPS Masters program																				
Training																				
Seminar on the use and perspectives of risk analysis																				
General concepts of surveillance and risk analysis																				
Basic epidemiology																				
Quantitative risk analysis																				
GIS in surveillance and risk analysis																				
Detection and assessment of emerging issues																				